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JOHN M. TYLER *et al.*, PETITIONERS,
vs.

JOHN P. SQUIRE *et al.*, RESPONDENTS.

CLOSING ARGUMENT

OF

HENRY W. MUZZEY, ESQ.,

IN BEHALF OF THE RESPONDENTS,

BEFORE

THE STATE BOARD OF HEALTH,

DECEMBER 29, 1873.

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ARGUMENT.

MAY IT PLEASE THE STATE BOARD OF HEALTH:—

A WISE and beneficent quality in the moral and mental nature of man asserts, as a governing principle in the administration of public justice, that where large powers are conferred upon a tribunal, they should be temperately, cautiously, and sparingly used. The Legislature has intrusted to the Board which I now have the honor to address, an authority, in some respects, unprecedented, and unapproached in magnitude by the powers bestowed upon any other tribunal in the Commonwealth. It is higher, even, than the sovereign power of *eminent domain*; for if the property of a citizen be taken for a public use, he must be compensated, and may have a jury to assess his damages. By a stroke of the pen, you may destroy that citizen's business, and forbid the use of his property, thereby, practically, destroying the property itself, and the law provides for him no jury; no redress, no compensation. The power to regulate, and prohibit the carrying on, of certain trades has long resided with the local boards of health in cities and towns; but the right of appeal from their orders to a jury has always been secured to the citizen by the law. The omnipotency of this Board is well exhibited in its freedom from the restraints that surround a trial by jury. If the jury err, the judge may set aside their verdict. If the judge rule the law incorrectly, the full bench of the Supreme Judicial Court may rectify the error. Thus, in every other forum, familiar to our law, the safeguards of jury and court are thrown around property. If they are missing here and in this proceeding, it must be because the Legislature, in creating this tribunal, and in clothing

it with such novel and extraordinary functions, believed that the character of those selected to administer its duties would assure just and adequate protection to private interests, as well as due attention to the public welfare.

And so it is that, this day, you, gentlemen, stand between us and the petitioners, as a fair and impartial tribunal, to judge and determine, according to the law, and the evidence submitted to you, between the parties to this hearing.

At the threshold of the case, lie two general inquiries,—Who are our assailants, and whom and what do they assail?

The petition upon your table is signed by eight individuals, claiming to represent the people of East Cambridge. In point of fact, however, it appears that, in this respect, they make an erroneous claim. In midsummer a meeting was called, with the professed purpose of obtaining an expression of public opinion, in the neighborhood, concerning the establishments located upon the borders of Miller's River. The call originated with persons hostile to these establishments; but when the meeting assembled, they found themselves in a minority of those who composed it; whereupon, under the leadership of the gentleman who represents them as counsel at this hearing, they questioned the right to take part in the meeting, and demanded the expulsion of, all who disagreed with them. The weather was not warmer than the discussion that this unfair demand provoked. Finally, upon a direct appeal to the employees of the threatened establishments, they withdrew from the meeting, having been told that it was intended only for the opponents of their employers, and not as a general meeting open to all citizens and taxpayers of East Cambridge. Their retirement, followed by the withdrawal, also, of many disinterested citizens, disgusted with the unfair proceedings, left the meeting greatly shorn of its original proportions. Those who remained, consisting only of the promoters of the meeting, and persons in sympathy with their designs, then carried out the programme in peace and with alacrity. Among other things, they resolved:—

“That the Board of Mayor and Aldermen, who are designated and empowered as the protectors of the health of our citizens, be requested to petition the State Board of Health, without delay, to order, as a sanitary measure, the following: That the several basins comprising Miller's River

shall, within as short a time as the greatest appliances will permit, be filled, the sewers to be constructed as the filling goes on."

This resolution was passed either in ignorance, or disregard, of the facts, that the Legislature had already ordered both the filling and the sewer, that the work was in progress, and that the State Board of Health had no jurisdiction in the premises. After the airing of much inflammatory rhetoric, they also passed a resolution calling upon the Cambridge Board of Aldermen to petition the State Board of Health to proceed against the slaughter-houses. But the Aldermen refused the request, as applicable to any of these establishments, and declined to take action against that of Mr. Squire by the strong and significant vote of *eight to one*, — the single affirmative vote being cast by an Alderman who had had a personal difficulty with Mr. Squire.

Our assailants had already applied to the grand jury, to indict the Squire establishment as a nuisance; but the grand jury, at the late term of the court, ignored the bill. Defeated everywhere else, — the local authorities of Cambridge and Somerville, and the grand jury, refusing to listen to them, — our restless and persistent enemies have brought their complaint to this Board. We meet them here with three, clear verdicts, already recorded in our favor by the local tribunals.

(1.) In the autumn of 1872 they petitioned the Board of Aldermen of Cambridge to suppress our business; but that Board, after a full and patient hearing, declined the invitation. (2.) On the renewal of their petition to the same Board last summer, it met with the same fate. (3.) They experienced a like failure before the grand jury, at its recent session.

No public body, charged with the duty of passing upon the question of the continuance of Mr. Squire's establishment, has ever condemned it.

I have the happiness to add to these results the further and dominating fact, that the Joint Commission, comprising this honorable Board and the Harbor Commissioners, appointed by the Legislature of 1872 to inquire into the cause of the nuisance existing in the valley of Miller's River, and to devise and recommend measures for its removal and cure, did not find it necessary to extinguish and drive therefrom the business which I am here to defend. That competent body — in their union, as the guardians of the commercial and sani-

tary interests involved — made a careful exploration of the subject. Unusually qualified themselves for this duty, they, nevertheless, called other skilled and professional service to their aid. They granted a public hearing ; they listened to testimony and arguments, and visited the ground embraced in the inquiry. After full and careful study, they made their report, which founded itself upon a broad and comprehensive survey of the matters submitted to them. It reconciled conflicting views of engineering and sanitary science, and declared that the remedy for the nuisance lay in the making of the basins of Miller's River solid land, and in the building of a grand trunk sewer, finding its outlet away from this district, and in strong ocean currents. These were mere recommendations. To give effect to them, it was necessary that the Legislature should put them into law. This the General Court the present year did, and further on, it will become my pleasure, as well as my duty, to assign the merit of this legislation to the source from which it sprung. The work of constructing the sewer has been undertaken, and is being prosecuted, — vigorously by Somerville, tardily, and with halting steps, by Cambridge. But the filling of the basin has been pushed forward by Mr. Squire, almost without co-laborers, official or individual. So much for public fact and testimony, already accumulated.

Our antagonists, then, appear before you as mere partisans of one side of a local contest. They come clouded with the unfairness and cowardice which denied to the whole community, drawn together at their call, the plain right to participate in the meeting. They come with three, and the only, special findings of tribunals against them, and in favor of us, upon the matters involved in this hearing. They come, further, to ask you to paralyze the hand most vigorously engaged in carrying out the measures of relief recommended by the Joint Commission, and indorsed by the Legislature, for removing the nuisance in Miller's River valley. They come in the face of official and private local sentiment and opinion. They come to assail, not us alone, but the great future of Boston. They come, heedless and impatient, to obstruct and thwart the developments, now in progress, of your own advice, approved by the Legislature. They come — a small, limited, and prejudiced set of individuals — to ask of you a condemnation of the good sense and judgment of the local and governing authorities of Cambridge and Somerville ; who, trusting

in your advice and that of your associates upon the Joint Commission, have entered upon the work you prescribed for them, and are confident of the results. They come in defiance of the voices of science and the appeal of commerce. I would do them no rudeness; but, in dismissing them now from consideration, I cannot withhold the remark, looking over the history of the controversy, and mindful of the intelligence and light which it has evoked,—so largely due to the Joint Commission,—that it is difficult to conceive how a pursuit which was begun in ignorance, can now, and under existing circumstances, be continued and inspired by creditable motives.

I pass gladly, and with pride, to the second inquiry,—Who and what are assailed? A brief review of the controversy is essential to the answer. You, Mr. Chairman, and a majority of the Board, have learned something of it, heretofore; but three of your associates have never had any official relations to it. I must, therefore, begin at the beginning, but shall not tax your patience long upon the subject. Two summers ago, the Squire, Boynton, and North establishments were summoned before this Board, on the petitions of the city authorities of Cambridge and Somerville. But a conference between the representatives of these cities and establishments, speedily revealed the truth (as Mr. Parker has told you), that the evil condition of the locality could not be relieved by the removal of the slaughter-houses, but demanded the application of broader remedies, covering the whole of the infected district. And so the complaints were, by the mutual consent of parties, withdrawn from your attention, upon the understanding that both should unite to secure legislative intervention and help. Upon petition, at the ensuing session of the Legislature, a hearing was had, at which conflicting engineering advice and theories gave rise to a reference, by the Legislature, of the whole subject to a Joint Commission, to consist of the State Board of Health and the Harbor Commissioners. The merit of suggesting this solution of the controversy belongs to Mr. Squire, by whose counsel it was presented to the committee, and who submitted a bill, which the committee recommended and the Legislature enacted. Mr. Squire, partly—as the two cities were in the main,—responsible for the condition of the river basins, desired that scientific differences concerning the proper treatment of the water-areas should be submitted to a competent body for determination. He sought to lift a subject of large importance to its proper plane, for intelligent examination and sound determination.

The Joint Commission met in the summer of 1872. They gave public notice of the hearing to all concerned. They listened to every suggestion which any one interested in the subject desired to present to them; and no one went away from the hearing without feeling that he had enjoyed a just opportunity, patiently and cheerfully accorded, of presenting his views and his interest to their attention. The Joint Commission, after the public hearing was closed, employed an eminent civil engineer, of their own selection, the Hon. Phineas Ball of Worcester, to aid them with his professional skill and advice in arriving at conclusions. The authority of the Commission was, against the desire of Mr. Squire, limited to making recommendations. He wished them to be clothed with authority to execute such measures for the relief of Miller's River valley as they decided should be applied. He was ready to submit the question, whether his own establishment and the business of slaughtering swine should be sacrificed, as well as the questions of filling and drainage, to their final determination. But, remonstrance being made by the cities, he reluctantly consented that the Commission should have only advisory powers.

The Commissioners made their report shortly before the meeting of the Legislature. Mr. Squire had contended before them, and presented high engineering authority to show, that the sanitary interests involved would be best satisfied by the bulkheading, dredging, and preservation from future defilement, of the water-basins,—together with the leading away to deep water of the sewage, then, and to some extent at present, discharged into Miller's River. The Commissioners and their engineer agreed with him upon the last proposition, but decided that filling the basin with earth was preferable to flooding it from the sea.

The methods of relief pointed out by the Joint Commission had, indeed, been substantially anticipated by the State Board of Health, who, on page 70 of their Report for 1872, remarked:—

“The great and pressing want in the case of these hog-slaughtering houses is *drainage*, and this they could have by the filling up the flats of Miller's River and the construction of a sewer through the whole length of the basin.”

To fill his fifteen acres, involved Mr. Squire in an expenditure of at least \$75,000, and brought no advantages to the conducting of his business. It was money sunk and lost to that. Still further, it

would sacrifice an existing benefit of his location, in that it would deprive him of the cooling influences of the sea around and beneath his works.

But he had asked for the Commission, and determined, in advance, to submit to its advice. Accordingly, when a hearing upon the question as to whether the plan of relief from the Miller's River nuisance, devised and recommended by the Joint Commission, came on before the legislative committee,—presided over by the able and intelligent representative from East Cambridge itself,—Mr. Squire appeared, and stoutly contended that the Legislature should accept and enforce the work of the Commission, *in all its parts*. He was the only party to the previous controversy that took this stand before the committee. The cities of Cambridge and Somerville—eager for a law to compel the filling, which they had advocated before the Commission—strenuously objected to being compelled by the Legislature to construct a sewer upon either of the lines recommended by the Commission, and indorsed by their engineer. They still plead to be allowed to follow the valley of Miller's River, and make the sewer outlet therein. The contest before the committee, however, resulted in a compromise between Mr. Squire and the cities, by which all were committed to the support of a bill providing for the filling of the basins, and leaving it optional with the cities to build a sewer to discharge either at Craigie Bridge, in Cambridge, or at Tufts's Dock, in Charlestown, but compelling them to construct one or the other,—both of these lines being highly commended by the Commissioners' engineer. A bill with these provisions was reported from the committee.

In the Legislature it was amended, by making it compulsory upon the cities to construct the sewer on the line to Craigie Bridge; and in this form the bill passed, receiving the almost unanimous approval of both Houses. (Acts 1873, ch. 304.)

What has been done under this legislation? In Somerville, the construction of the required sewer has been reasonably prosecuted; but Cambridge has done nothing within her territory. Cambridge sewers still empty into Miller's River. Mr. Squire's duty under the act has been met and answered in a manner worthy of all praise. With that good faith and ready submission to results which has characterized his every action, he, as soon as the act passed, made

his contracts to meet it, so far as any of its provisions were directed at him. When the season allowed, he began to move Prospect Hill into the river basin which he owned ; and has since made that degree of progress with the filling which might be expected by any one acquainted with his determined and energetic character. He has expended in this work, already, nearly \$30,000, and the total cost to him will reach, at least, the sum of \$75,000. The early summer will find his part in the work, which you advised, well and thoroughly done. Had all related to the accomplishment of the remedy for the nuisance taken hold of their respective duties with the same fidelity, honesty, and energy, the ensuing summer would witness no trace of the famous and infamous "Miller's River nuisance." But my clients cannot control the movements of public bodies. What belongs to them is, and will be, promptly and faithfully accomplished. Mr. Squire is doing something more than what the law commands. He is spending very large sums in improving his premises, and in building a fine market and lodging-house, of substantial brick and tasteful construction, in East Cambridge. So much for the man and his characteristics. It is always pleasant for me to speak of him, for I feel that my feet rest upon solid ground. Sustaining toward him the relation of professional adviser and counsel from the beginning of the controversy, in which he has borne so manly, consistent, and useful a part, I think I may claim to know the man.

It was scarcely to be supposed that, after what I have already detailed to you, anybody could be found — however much disappointed and smarting under the defeats accompanying previous investigations — bold or impudent enough to resort to this Board, in the expectation or hope that you would interfere, at the present time, with the business of the establishment for which I speak. Did they suppose that you would pay no attention to the fact that it had been conducted with a view to trying the propriety of its existence under your own advice, sought for in your published reports and in the action of the Joint Commission, and followed regardless of what expense might be incurred thereby ? There may be deaf ears in these matters, but I do not speak for them. We have something at stake. I doubt if its magnitude is entirely appreciated even here, and I know that the community at large were, before the developments at this hearing, little aware of what the stopping of the business of this establishment would entail upon the community.

Let me give you briefly and comprehensively a few statements of fact in this connection. The premises owned and occupied for their business by John P. Squire & Co. comprise about twenty acres, or 880,000 square feet of land. Their buildings, alone, cover over five acres, or more than 200,000 feet. Besides the immense houses devoted to the various processes of the business, — assembled within the enclosure are an ice-house, holding 8,000 tons ; stables ; coopers' shop ; harness shop ; wheelwrights' and blacksmiths' shops ; — in short, every facility for pursuing the business is gathered there. Persons familiar with establishments devoted to the same business, in this and foreign countries, inform me that there is nothing, at home or abroad, which in size, completeness, and cleanliness is superior to the establishment of my clients. Their works have cost a half-million of dollars, and the annual product of the establishment is constantly increasing, and has already reached \$8,000,000. 400,000 swine are slaughtered annually. 700 men, whose annual wages reach \$500,000, and 70 horses, are employed. The value of the product shipped yearly to Europe is \$3,000,000, and of that sold in the domestic market, \$5,000,000. But, as yet, I have spoken of what relates to the business within the walls of the establishment. Pass with me to the impulse given to business outside of it. It requires annually for its uses 10,000 tons of ice ; 2,500 tons of coal ; 200 cords of wood ; 19,000 hogsheads, or 5,000 tons, of salt. These are a few of the items of consumption.

Let us reach to broader interests ; stretching east and west, and over the ocean. The pork-slaughtering and packing establishments have become of vast importance to the commerce of Boston, in sustaining lines of communication with the West and with Europe. A commercial centre depends for its prosperity and importance upon the avenues of communication that lead to it from tributary territory. The ship and the railroad have made Boston what she is as a mart of trade. Not the merchant only, but the whole community, are interested here. Cheap, quick, and convenient transportation, inland and ocean, are concerned, for all who have occasion to transport or travel. This one establishment pays to the Cunard Steamship Company about \$300,000, and to the Boston and Albany Railroad \$700,000, in freights, annually ; also, above \$25,000 in freights to Antwerp.

The momentous question addressed to this Board, here and now, is,— Shall this business be stricken down? It presents itself for consideration in three branches, or divisions: first, and paramount, in its sanitary aspects; second, in its commercial or business aspects; and third, in the weight justly to be accorded to public opinion, as applicable to both of the preceding.

The history of the case has already reached satisfactory scientific determinations of sanitary questions.

In the autumn of 1872, when the investigation before the Cambridge Board of Health (composed of the Mayor and Aldermen) arose, Dr. Charles T. Jackson was employed by Mr. Squire to make a thorough exploration of his establishment and its surroundings. This resulted in an entire vindication from the charges which had been brought before the Board. The errors into which Mr. Munroe had been led, some of which he has repeated at this hearing, and others which he has wisely and conscientiously abandoned, were plainly exposed and brushed aside. I regret that no report of Dr. Jackson's testimony, which exhausted the controversy, has been preserved. No one then looked for the misfortune which has, within a few months, sadly overtaken him. I am sure that I may speak, not only to, but for, the members of this Board, in expressing the hope that he may soon be restored to his accustomed labors in the paths of science.

When we were notified of the petition against us, the return of Professor Horsford, from conspicuous service in the National interest at Vienna, was understood to be near at hand, and was eagerly watched for in behalf of Mr. Squire. After his arrival, he had hardly enjoyed a half-day's welcome from his family before he was applied to to investigate the charges against the Squire establishment, which had been laid before you. Conflicting engagements made it impossible for him to promise to undertake the work, unless sufficient time should be granted to him. He had never been known to have set foot within Mr. Squire's establishment, or to have expressed any opinion concerning it, or upon the vexed question of the neighboring nuisance; but Mr. Squire, always ready to submit to the results attendant upon skilled and competent investigation, instructed me to apply for a postponement of the hearing before this Board till such time as would enable Professor Horsford to enter upon and complete the work requested of him. We thank you for granting the request, and believe that all concerned in this

proceeding, and the cause of justice itself, have been benefited by the postponement. Professor Horsford has made and presented to you, in his masterly report, the result of a minute and searching investigation into every department and detail of our business. He is informed as to similar works in this country and in Europe. He has explored Miller's River and the surrounding territory, and, by an independent route, reached the same conclusions which Dr. Jackson presented at the investigation of last year.

There is no mystery. The cause of the trouble bares itself readily to the eye of science. Miller's River is only the companion of numerous other seats of pollution upon the shores of the Charles and the Mystic. And, after the filling of the basins shall have been accomplished, and the great sewer built and in use, there will still be complaints, as Professor Horsford reminds you, while Charlestown Mill Pond, Broad Canal, the marshes east of the House of Correction, Prison Point, the Cambridge shores of Charles River, on either side of West Boston Bridge, the water angle near the junction of Charles and Beacon Streets, and, finally, the estuary of Miller's River itself, are allowed to continue as settling basins for the sewage of Boston, Cambridge, Somerville, and Charlestown. Analyses of mud taken from all these places, and from many others defiled in the same way, reveal the one common source of the insalubrity of the air breathed by our people.

Mr. Merrick's analyses show that sulphuretted hydrogen comes from all of these places. Bad as the basins of Miller's River are, and strong as is the demand for their obliteration, the air is tainted by the filth in other localities quite as much; and the deposit taken from a neighboring spot, lying between Portland Street and the Grand Junction Railroad, and near to Broad Canal, in East Cambridge, shows a greater amount of sulphuretted hydrogen than could be discovered in any part of the bed of these basins. Some parts of Broad Canal itself, *to whose foulness no slaughter-house has ever contributed*, taint the atmosphere, in close rivalry with Miller's River, and with like weapons. In fact, public attention in Cambridge has, since the passage of the law for the relief of the Miller's River district, been diverted therefrom to the condition of Broad Canal. Private suits have been instituted against Cambridge by individuals having proprietary rights in the canal, and the local newspapers are loud in the demand for the turning away of the sewers, and other steps for the purification of the canal.

I have alluded to the fact that improvements have already been made, and others are in progress, in the interior of the Squire establishment. In July last, the Cambridge Board of Health passed an order requiring the combustion of the gases in all establishments engaged in rendering by steam. The gases, being soluble in water, had hitherto been discharged into a vat of water, refreshed and changed by each tide, beneath the building; but upon the passage of this order, Mr. Squire immediately complied with it, and the gases are now being successfully destroyed by the furnace fires. That the gas from the rendering-tanks is thoroughly consumed by the boiler fires, is satisfactorily shown by the experiment of letting it escape from an aperture in the pipe into a room, when it has been found to burn freely and emit no odor. The patentee of the Turner process, which is in use at our works, claims an illuminating power as among the merits of his invention. His own establishment is lighted with this gas. Two years of improvement in inventions for the destruction of injurious gases generated in rendering-establishments, have elapsed since the making of the Report of the Superintendent of Health of Providence, in 1871. Science has been on the march ever since, until now undoubted success has been reached in the apparatus in use at the Brighton *abattoir* and in the Squire establishment.

I quote, from the Report of the State Board of Health for 1872, the following:—

“As regards *bone-boiling* and *fat-melting*, if the material to be used is fresh, and unchanged by any taint of decay, the vapors coming from it can be condensed in water, and there are several available plans for doing this without offence, if water is abundant and drainage complete.

“If, however, the material is tainted, as is certain to be the case in the waste animal matter collected in a large city, there is no process known to us by which the complex gases thus combined with watery vapor can be destroyed, except by fire.

“This mode of dealing with them is effectual, and apparently the only conditions for success are, the having a fire so hot that the watery vapor may not put it out, and delivering the gases at a high temperature.”

Of his own motion, Mr. Squire has arranged to do all the trying and rendering of pure, as well as of impure, matter in steam-close tanks,—although in Paris the rendering is still done in open kettles, in the best appointed *abattoirs*. Other changes in the establishment have been made, by which, among other things, the

slaughtering and cleansing apartments have been removed to another part of the premises, which is provided with tight or seamless floors. All of the blood and offal is conveyed from the Squire establishment, in air-tight carts, each night. The solid contents of the scalding-tub are precipitated, and removed in the same way. The "soup" from the rendering-tanks is sweet when drawn off. It is soluble in water, and is easily borne away with the tide. But Mr. Squire, in view of the doubt raised at this hearing, whether the "soup" may safely be discharged into a sewer, has contracted with Mr. Upton for its daily removal from the works in air-tight vessels. You will observe with what enlightened steps this establishment advances in the path of improvement. It only awaits the new sewer to accomplish the best conditions in the conduct of such an establishment which science has offered. Mr. Chase, the engineer appointed to superintend the construction of the new sewer, and a very competent authority, tells you that the sewage from the Squire works may be received into it without difficulty of any kind, and will make no perceptible increase in its contents at times when its mouth is closed by the tide. The contributions to the sewer from these works will consist only of such matters as are recognized, in your Report for the present year, as proper to be carried away in a public sewer. I find these enumerated in the following paragraph, appearing on pages 28 and 29 of the Report:—

"There are other forms of refuse, of a fluid or semi-fluid kind, which may be carried away by force of gravity in sewers. The washings and scrapings of hides, both their outer and inner surfaces; the washings of hogs, after scalding their skins, as is practised at hog slaughter-houses; the wash of all slaughter-houses and of stables; chemicals used in the preparation of leather and morocco; chemicals used in woollen and cotton factories and print-works; the fluid waste of rendering establishments and of soap-factories,—these are among the most important of this class."

Experiments with disinfecting agents, to be applied to the swine in the cars, are being made, with every prospect that soon the animals will arrive in an inoffensive condition. They are taken directly from the railroad into the receiving-house, the floors of which are strewn with charcoal, wet with carbolic acid, for their reception.

You are aware that existing, under the sanction of the Board of Health of the City of New York, are two large hog-slaughtering establishments, upon the North River, known as the "Booth and

Tobey Works." In one of these, the gases are discharged under water; in the other, they are consumed by fire. Formerly, Mr. Squire used the first method; now, he employs the latter. Both of these establishments, whose methods were recently examined by Professor Horsford, have the sanction and approval of that Board of Health, of whose vigilance and courage it is sufficient to remark that they levelled to the ground, in a single night, buildings, styled markets, covering acres of ground, because of their unhealthy condition and distributions.

In passing, I have to remark, that I represent clients who are now employing the best established methods and welcoming fresh suggestions. If anything now existing about this establishment, or in any of its processes, is susceptible of substantial improvement, when the light is welcomed, the change will be made. Trust the record for this. *Do not forget that Mr. Squire has solemnly promised you, during this hearing, to be guided by your advice in these matters. If you recommend an improvement, he will adopt it.*

I infer from the statute which created this Board, that its design was to assemble a qualified body of gentlemen who should investigate questions of moment to the people, concerning health and life, with a view to disseminating throughout the Commonwealth sound and enlightened instruction and advice upon practical sanitary subjects, and to presenting suggestions to the Legislature, which, taking the form of law, might advance the general welfare in these directions. If I am right as to the original intention of your office, it is very apparent that subsequent legislation has cast upon you duties and functions not contemplated at the start. I am glad that the State has the happiness to find gentlemen who are willing to perform, gratuitously, such self-abnegrative services as this one hearing has, for a whole month, imposed upon this Board. Remembering the earlier intention of your office, am I not right in suggesting that it is well to preserve my clients, if for no other reason than that they have the spirit, as well as the pecuniary ability, to put upon practical trial whatever you may, in the acquisitions of your wisdom, discover and recommend as likely to rid the community from all offence in conducting the pursuit in which they are engaged?

The statute gives to this Board the power to prohibit, but not to regulate, the carrying on of the business pursued by my clients. It

should have authority to do both. I am authorized by Mr. Squire to make public a proposition which has already been communicated to the petitioners and their counsel. It is this: That the present complaint be allowed to subside until the meeting of the Legislature, when Mr. Squire would unite with them in urging the passage of a law conferring upon this Board, in addition to its present authority, the power to regulate the business of slaughtering, and to prescribe the manner in which it shall be conducted. I regret to say that this proposition has not been accepted; but we are in the season when any offence to the community, real or fancied, is suspended by the cold weather. Nobody can be harmed by a little delay in the proceedings before you; and I understand, from the opening argument of their counsel, that the petitioners do not ask for the immediate suppression of our business.

I thought I perceived, during the presentation of the complainants' case, an attempt to convict my clients of a violation of the Lord's day; but the examination of Mr. Squire, who is a thorough and practical Christian, put an end to this suggestion. The works are never run on Sunday, except in times of necessity (which the law upholds), as when the comfort and convenience of the community demand, occurring chiefly during warm weather. The milkman must follow his route on Sunday as well as on week-days. So the early Monday market for fresh meat must be supplied.

Comprehensive remedies, not limited to one spot or a local trouble, but governing all related areas, must be applied. Too much, heretofore, of misleading has arisen from the accidental circumstance that upon the borders of Miller's River was located a particular industry. It was not unnatural that the unskilled observation of the neighborhood should trace the difficulty to this source. It belongs to this Board,—and, pardon me for saying, to opportunities like the present,—to draw attention to that overshadowing cause of attack, which every fresh investigation brings more clearly into the light, as threatening the health of Boston and its vicinity.

Allow me further to suggest that the broad office of this Board—the felt need which called it into being—presents wider reaches than any isolated case can furnish. I very much regret that what was known as the "Codman Bill," reported from the Committee on

Water Supply and Drainage last winter, failed to receive the sanction of the Legislature. It provided for the appointment of a commission, to consider and report to the Legislature a plan for the sewerage, water supply, and grade of highways, in Boston, and a territory of ten miles beyond the city. The bill was cordially supported by Mr. Squire, who employed counsel in its behalf. As the law now stands, each town and city must find the outlets of its sewers within its own territory. The suburbs of Boston have not become very populous, but public attention has been arrested by the fact that this limitation is not only absurd, but dangerous to the neighboring communities. This matter has already attracted the attention and censure of this Board. The towns of Woburn and Winchester drain into a pond, the source of the river which supplies Charlestown, Chelsea, Somerville, and East Boston, and will soon, probably, supply the city proper, with water. The positive present need of Boston, the limits of which have already crossed Charles River, is an adequate realization of the growing needs of a great community,—situated upon the sea,—for that system of sewers which, while meeting the conveniences and necessities of the shore, shall offer the least possible obstruction to the ocean paths that lead to the wharves and make the commercial importance of the city.

It is not difficult to anticipate the general direction, so far as sewerage is concerned, which an inquiry like that contemplated by Colonel Codman's bill would demand. For both shores of Charles River, meeting in their passage to the harbor Miller's River and the Mystic, there must be relief. A system of discharge, for the east and west shores alike, must be devised. It must intercept and gather all which now finds its way into the rivers, so as to convey it, and all of the sewage from both shores, far into the strong tidal currents, so that the flood will bear, substantially, nothing back. Otherwise, and under present circumstances, it is only a question of time when the city of Boston, and particularly its western shore, overlooking the Charles, shall become positively uninhabitable. Advance, I pray you, guardians of the public health, the thought of the community to what is within easy, and not remote, contemplation in these respects. Continue the investigation and thought upon the sewage problem, begun with such ability in the admirable paper contributed by Dr. Derby and Professor Nichols to your Report for this year.

Do us the justice to remember that the Squire establishment is on trial, singly and alone, and for its own faults only. An artful design of our opponents, in bringing before you nine separate complaints in a bunch, was, undoubtedly, to link the best and the worst together in the district within which all were located. At our earliest opportunity we objected to this congregation, and claimed the right to be tried separately, and to stand or fall on the individual merits of our particular establishment. We aim no blow at others, although we may have suffered by and from them ; but in the early summer Mr. Squire, defending from unjust aspersions, instituted an observation of what was going on, in general, upon the territory where his works are situated,— the results of which have been presented to you. Let me say that this observation was undertaken from no sentiment of ill-will toward any one, but to disarm a misdirected prejudice, and to enlighten a community as to the true sources of annoyance which exist independently of the basins of Miller's River. It is not for us to pass judgment, nor would we, in any degree, prejudice any man's defence ; but we cannot suffer longer on account of the misdeeds of others. It is probable that among the nine complaints simultaneously filed before you, the innocent and the guilty have been mingled together.

The long and carefully pursued investigation of Professor Horsford, with its conscientious and clear declaration of results, aided by the determinations of Mr. Merrick, and the studies and testimony of Mr. Avery (to whom the inquiry is much indebted), relieve me (as they will all be preserved in print for your use) from the labor of a re-presentation of the conclusions reached by these eminently qualified chemists.

I have preferred, in shaping this argument, to deal with the broad, general questions which surround the case and must determine its results, rather than to employ myself in pointing out mere discrepancies, follies, and contradictions in the testimony of the petitioners' witnesses. If I were disposed to do this, I should not spend a moment over the attempts of local witnesses to distinguish one odor from another in the atmosphere of this variously afflicted district. It is sheer nonsense for the scent of the unscientific to essay that. I am, however, greatly tempted to recall to your attention the strong, consistent, and convincing evidence which has been brought forward by the respondents,— covering every salient point in the contro-

versy, by an overwhelming preponderance of the proofs. I must banish the temptation, however, since the proper limits to be assigned to an argument on this occasion, forbid any attempt at an elaborate review or discussion of the voluminous testimony. I have the strength, and you have the patience, only for results.

Regarding the charge that unpleasant odors have, on various occasions, emanated from our establishment, to the annoyance of a wide community, it appears that in most, if not of all, of the special instances of discomfort, the wind has defended us from the accusation. Thus, on the night of the 31st of July it came to our aid ; and I should suppose that, on a review of the whole body of testimony, there could be no lingering hope on the part of our opponents of maintaining aught against us in connection with that night of widespread and unparalleled suffering. Another potent fact, pointing to the source from which proceeds the gas that chiefly troubles the inhabitants, is associated with the events of the 31st of July. The wind was from the southeast. The white-painted buildings opposite the Squire establishment, on Gore Street, preserved untarnished surfaces where exposed to influences from the northwest,—showing, again, that nothing proceeding from that direction inflicted itself upon the neighborhood that night.

The lead papers exhibited here, to show slight traces of sulphurated hydrogen obtained within the establishment, are insignificant guides to conclusions upon the question whether injurious gases are generated by our works. Deeper discolorations may be obtained within any kitchen, when the roasting, broiling, or even boiling of meat is going on.

A significant fact which challenges attention, because it demolishes the theory of the complainants, is that the bad odors pay intermittent visits to the inhabitants. Now, the processes carried on in our establishment have no pause. Day in and day out, night in and night out, there is like and unceasing occupation and movement. Why, then, do not the inhabitants get the odor every night or every day ? Our opponents tell you that the direction of the wind makes no difference. Witnesses say that they have perceived the odors when approaching the establishment from the direction in which the wind was moving, and that the smell was stronger at a consider-

able distance from the works than under their very walls. They also claim that on occasions when there is no wind the odor is perceptible miles away from us, though not observable at all, or not as strong, near to the establishment,— which seems an absurd statement. (By the way, if it be true that the odors travel long distances, and are not perceived near by, it would be better to have the rendering establishments located in close neighborhoods, rather than on their outskirts.) They further pretend that when no unpleasant odor from the rendering vessels can be detected inside of the works, the outside atmosphere is tainted from them. Now, if these things be true, the like cause should produce the like result. The machinery of our business is never idle. That this establishment is not guilty of discharging foul odors into the air is proved by the fact that they are not always present in it. Whatever impurities, not wholly traceable to the foul marshes and basins, enter into the atmosphere and are perceived at times, it is reasonable to believe are chargeable to the grease-boiling places, whose kettles are not constantly heated, and whose fires are lighted only at times when a sufficient quantity of material has accumulated to fill the kettles. Here is disclosed a sensible and trustworthy solution, from coincident facts. Our processes are constant ; the odor is inconstant. The grease-boiling is intermittent ; the odor is intermittent. Add to these facts the further circumstance, that the odor is perceived chiefly at night, and the grease-boiling is mainly done in the night. There is no “moving of gases against the wind,” or other nonsense, about this explanation. Instead of leaning for support on shallow improbabilities, it plants itself upon common-sense.

No one should be condemned for a momentary misfortune,— an accident. Your inquiry is concerned with ordinary procedures and effects. Because during the evening of the 31st of July there was a slight escape of gas, all traces of which disappeared in ten or fifteen minutes, and which was caused by the water in the condenser becoming heated, it would be both ridiculous and unjust to condemn a piece of machinery, then on its first trial, and which has since performed its office with unvarying success. A similar accident might occur at the Brighton *abattoir* ; but should the *abattoir*, therefore, be denounced as a failure and a nuisance ? If a main sewer, built in the made land of the Back Bay, breaks away because of unequal settling of the soil, or if houses in the neighborhood are troubled

with bad air from the sewers by reason of imperfect traps, shall the sewer system itself be condemned?

Allow me to suggest that our particular business has increased, in this vicinity, faster than the attention of scientific men has been directed to methods for conducting it in a safe and unobjectionable manner. Mr. Squire is alert and submissive. He is receptive; and the record shows that he welcomes and adopts every sound suggestion of improvement. Unless it is proposed to sweep away wholly this business from Massachusetts, let him stand, as an example to all others, engaged in a business in the conduct of which there must be a compromise between individual profit and the public welfare.

Everything cannot be accomplished in a moment, and it is only fair and just to await the development of well-intended and vigorously pursued efforts, which are built upon the best attainable advice and instruction. I am happy to find this position indorsed by the State Board of Health, in their Report for 1872, from which I quote these considerate and sensible words: "Such changes" [referring to the concentration of the slaughtering of cattle and sheep at the new *Abattoir* in Brighton] "cannot be made in a moment. They require deliberation; a regard for the rights of property, and a careful consideration of many details of construction."

The latest judgment of the Metropolitan Board of Public Works in London — the healthiest city in the world — condemns the *abattoir*, borrowed from France, and declares that the 1,687 slaughter-houses of that city had better, for sanitary reasons, be conducted separately.

The mention of the *abattoir* at Brighton, reminds me that I should allude to the difficulties that met us upon the suggestion made by the State Board of Health at our preliminary appearance to answer the complainants' charges. The slaughtering of swine being a business not intended, like that of the slaughtering of cattle and sheep, to supply merely a local demand for fresh meat, but having a vast foreign and domestic market, its magnitude, alone, renders it impracticable to concentrate the business in a single establishment. Mr. Squire's works, of themselves, are twice as large as the *abattoir*. The other legitimate establishments (North's, the Boynton Packing Company's, and Lincoln and Chamberlain's), combined equal the

Squire works ; so that our union would make an establishment, at present, four times as large as the *abattoir* at Brighton. Now, we of this particular establishment have learned that public suspicion and condemnation bear an intimate relation to the size and magnitude of these establishments. Because of their extent, Mr. Squire's works have borne the brunt of the common battle of the business for existence. Because his establishment is larger than any other, the petitioners put it in the front. Hoping to taint it by association, they involve with it, in filing petitions, the humblest grease-boiler in the district. Knowing well that if they can obtain your judgment against it, they can easily sweep the whole district, they force us first to trial. Thus to-day, as in the previous history of this trouble, the contest falls primarily upon us. We welcome the situation,—with its just limitations. Full well they know that our establishment is ruled and conducted by men best equipped to try the question,—and here you have it in its length and breadth,—whether this business, adopting into its processes, regardless of cost, the best and freshest achievements of scientific direction, shall live anywhere in Massachusetts ?

Let science do its best, there will always be complaints and complainants. It would be very easy to bring before this Board twice as many persons from Old Cambridge as the petitioners in this case have produced from East Cambridge, to testify to you that the Brighton *abattoir*—the child of your creation and care—brings intolerable odors and offence to their dwellings. The local newspapers of Cambridge were filled last summer with this accusation. The writers were positive as to the direction of the wind ; and some of them claimed to have followed the odors to their source,—the *abattoir*. It is probable that these odors did not proceed from the *abattoir* at all, but came from the small slaughter-houses in its neighborhood. *Size* frightens the public. Thus to the Squire establishment, because of its magnitude, are falsely attributed the odors arising from the uncleanly grease-boiling places located around it.

It is my duty, in this connection, to attract your attention to another embarrassment, forbidding the removal of our business, which interests the purchasing community quite as much as ourselves. If, abandoning our present well-chosen location, we were to retire to a greater distance from the point of local distribution, we should not only sink a half-million dollars invested in our buildings, but the consumers of our products must be charged with an increase

in the price of meat sufficient to make good to us the additional cost of transportation, which would amount to \$ 25,000 a year for each mile of the distance of our retirement from the metropolis.

Where, I pray you, shall this business be conducted, if it is to be kept for the commercial benefit of Boston, and in the interest of cheap meats in the neighborhood? Such an establishment cannot be located, afresh, in any place containing four thousand inhabitants without leave of the local authorities. It cannot exist in any such new locality without liability to encounter a petition to this Board for its suppression, like that to which we now respond. It is, therefore, a simple question of abolition from the Commonwealth.

Well, gentlemen, look at the spot and its surroundings where we now are located. Trace its history. You find it has been devoted to a similar business for a period stretching beyond the recollection of most men now living; you see that the lines of railroad communication necessary for its continuance, both for the reception of the live animals from the West, and the transmission of the product, alike for foreign shipment and domestic distribution, conveniently centre there. I need hardly allude to the ancient slaughter-house, soap-boiling, and tallow-chandler's shop of the Winchesters. I suppose that the fact of their having taken possession of this particular spot led the glass manufacture to resort there. One thing is absolutely certain, that for three generations trades, recognized as offensive in a measure, have planted themselves upon this spot. Low and marsh ground for the most part, it was not inconsiderately chosen. Intelligent citizens have deserted it as a place of residence, year by year. No ties of homestead can resist business developments and aggression, as the history of Boston changes shows. Unless Mr. Munroe's idea is to prevail, that no slaughter-house, however well furnished and conducted, is to exist, unless it is surrounded by a square mile of uninhabited land, it is difficult to conceive of a better present and prospective situation for the Squire establishment than that which it now occupies. If we were driven to a barren waste, a close neighborhood would rapidly spring up around us. The workmen must live near their work. Then the physician and apothecary, the grocer, butcher, baker, and tailor, would come. The school and the teacher, the church and the clergyman, and all the belongings of social life, would follow. We should make a very respectable village at the start. There are

fourteen hundred men employed in these establishments, representing a population of, say, seven thousand persons. Observe the proportion between this population, located where these establishments now are, and the total number of inhabitants in East Cambridge,—namely, nine thousand. We did not come to this population; it has come to us. Isolation for this business from populous neighborhoods is impracticable.

Now I have to submit to you that it has already become a substantial fact, that the belt of territory in Cambridgeport and East Cambridge, eastward of a line drawn three hundred or five hundred feet west of the Grand Junction Branch of the Boston and Albany Railroad, and between Charles and Miller's Rivers, must be surrendered to factories and business. Lines of intercommunication settle these questions. Lying between land and water transportation, this territory has been, and must continue to be, seized upon by business. Nature and art have combined to make it a site for business. The assessors' books show that the valuation of East Cambridge has nearly doubled within the last five years, having risen to \$9,656,480,—of which about \$4,500,000 is represented by manufactures and other branches of business,—while that part of Cambridgeport, lying within the belt described, is almost wholly devoted to similar occupation. Mark, also, the wonderful increase in population and valuation of Somerville. Its population in ten years, from 1860 to 1870, was doubled, while its valuation has risen from \$12,590,900, in 1870, to \$29,643,100, in 1873,—a gain in three years of over one hundred *per centum*.

Slaughter-houses exist in all large cities—in London, Paris, and New York—in densely populated neighborhoods. What, that is peculiar to Boston, should drive these industries hence? Why, especially, strike down the one establishment which I represent, located in this suitable suburban place, and confessedly the rival of any other in the world?

Your authority is a broad one. If the "*health, comfort, and convenience*" of the inhabitants require, you may exterminate the business in which we are engaged. But a power as ample existed in the local boards of health before your establishment. Do I read the law incorrectly, in inferring that the Legislature in creating this Board, with its greater and more comprehensive powers, contem-

plated a broader view and judgment upon the subject ? If a local board, under the law, makes investigation, it can have in view only the " health, comfort, and convenience " of the limited community for which it acts, and whose interests only are its concern. It cannot legislate beyond town lines ; but the *State Board of Health* surveys all Massachusetts. Its ample commission brings not only the health of a limited community, but the health, comfort, and convenience of the whole people, into its vision. Yes, and beyond this, it summons into view all that relates to the well-being and prosperity of the whole people, and the broad and general interest of all. It is in the light and elevation of this aspect of your duties that Boston — so largely contributing to produce the distinction of the State — calls upon you, in this investigation, not to be deaf to the appeal of commerce.

The " comfort and convenience " of all the inhabitants of Massachusetts do not require the total suppression and abolition of this business, — certainly not in an establishment conducted as ours is. If it makes a limited neighborhood a less agreeable place of residence, let those who suffer betake themselves away from it. This is no great hardship. Business is inexorable. It is pleasant to live upon an ancestral estate ; but the " North End " is no longer the court end of Boston, as it was in the days of our grandfathers. The descended home-attachments of East Cambridge were long since doomed. Trade will have the water-front. Mr. Soule was right in removing his family outside of the line of encroachment. Hundreds of sagacious citizens had preceded him. The Rev. Mr. McDaniel was right when he said, if the advance of business made his home disagreeable, he must retire his home from its lines. But some people must remain there. They are fast being reduced to that class whose employments require them to sacrifice to their situation very many desired comforts. There are many useful and necessary callings, pursued for the benefit of the whole community, that diminish the pleasures of life to those who keep them in motion. But from this locality there comes not to you, from this class, a single voice against us. Nevertheless, you are to consider them as within your care.

There remains, therefore, this question : Does the " public health " demand the suppression of the Squire establishment ? Our opponents have exhausted every available resource upon this inquiry.

The end of it all is, that they have failed to show, in the feeblest woman or child in East Cambridge, a case of suffering which produced anything more than nausea (vomiting in rare instances), or a slight irritation of the throat. In no single case was a physician's attendance ever summoned. They made a public appeal by resolution, printed and circulated, for testimony; and this is the result. In practical contradiction of the notion that the business pursued in our establishment is detrimental to health, the condition of Mr. Squire's men and their families is a living, present, overwhelming witness. I remember that at the Cambridge hearing, last year, these same complainants called several local physicians, in the hope of showing that the odors from the Squire establishment produced fevers in the neighborhood. The absence of these gentlemen and of this accusation, at the present trial, is very significant. It is barely possible that it may be traceable, in a degree, to the circumstance that before that former hearing closed some attention, in behalf of Mr. Squire, was drawn to the fact that *fever poisons are inodorous*. The origin of fever is still held, I believe, by the highest medical authorities, to be shrouded in mystery. Various theories upon this subject have had their day, and perished.

If credit is to be given to the Registration Reports of Massachusetts, the business of slaughtering animals does not tend to increase the death-rate in the communities where it is located. The butchers — like the cooks in our kitchens, living in the midst of odors similar to those prevailing, in a less degree, from lard-rendering in the Squire works — are noted for health and longevity. From the Eleventh Registration Report is compiled the following table, which presents the returns of four years, 1849 — 1852, inclusive: —

Deaths — Four Years — 1849 — 1852.

Towns.	Inhabitants.	Average age of death.
BRIGHTON	2,356	23.02 years.
Brookline	2,516	21.95 "
CAMBRIDGE	15,215	21.91 "
Charlestown	17,216	21.14 "
Lowell	33,383	19.72 "
Natick	2,744	21.12 "
Boston	136,181	20.36 "
Chelsea	6,701	17.87 "

This table represents a period anterior to the introduction of the swine-slaughtering and rendering business, at present conducted upon the shores of Miller's River. From it we find that Cambridge,

without slaughter-houses and with drainage, was less healthy than Brighton, with slaughter-houses and no drainage. It also appears that in the town of Brookline, exempt from slaughter-houses, the average duration of life was less than that in the contiguous town of Brighton. A further noticeable fact is, that in the town of Chelsea, also without slaughter-houses, but largely composed of marsh-land, the average age at death was 17.87 years, while in Brighton it was 23.02.

Further reference to the same report may be useful. It affords these facts:—

	Population.	Deaths.	Death-rate.
Cambridge	15,215	1,541	1 in 39 $\frac{1}{2}$
Brookline	2,516	185	1 in 54 $\frac{4}{10}$
Brighton	2,356	143	1 in 66

It thus appears that during these years Cambridge had an annual death-rate of more than one in forty, while Brighton had a death-rate of less than one in sixty-six. Of the land within the limits of East Cambridge, from 60 to 75 per cent is marsh.

The eminent *Parent-Duchatelet*, in a work on Public Hygiene, published in Paris in 1836, gives the results of personal observation, together with facts collected from public and other sources. From this work it appears that the men and women employed in the knackers' yards at Montfaucon in skinning and cutting up dead horses, are healthy and long-lived, even where the animals have died of diseases that would have poisoned persons employed in the care of them while alive. The tanners who dress the skins of the horses are not affected by the diseases of which they died. During the cholera, in Petite-Villette, bordering on Montfaucon, the mortality was one in sixty-nine; while in Grand-Villette, which is distant from it, one in sixty died of the disease. Not one man in the knackers' yards died, and not one was sick.

It is believed that decaying vegetable, not animal, matter occasions disease.

I submit that a just and reasonable interpretation of the statute applicable to the present inquiry does not call for the suppression of the Squire establishment, unless its continuance is proved to be injurious to the health of the inhabitants. If only offensive to the sense of *smell*, it is not to be crushed. It stands upon the same basis with many other things not altogether agreeable, but whose

existence, instead of being against the "comfort and convenience" of the community, is essential to its sustenance. The slaughter-house is necessary,—for the people must have food. Gas-works are offensive,—but the people must have light. The gathering and carting of garbage and swill in the streets of Boston is an offence to all passers-by, infinitely greater than the transporting of any part of the refuse of slaughter-houses can occasion (indeed, the latter can give no offence at all when conducted in air-tight wagons),—but the refuse from dwellings and shops must be removed from the city. Horse-car stables are not agreeable,—yet they must be located among the people who make use of this mode of travel. Even school-houses are so objectionable that, in order to secure land in eligible locations for them, it has been found necessary to confer upon the local authorities the power of *eminent domain*.

The history of Miller's River is the history of the shores of Boston and its neighborhood. That river, like the Charles, was formerly pure. The discharges from the sewers, and the slaughter-house contributions in unenlightened days, aided by artificial changes of the natural shores and the increase of population, have turned Miller's River into a series of foul, precipitating catch-basins. Not very much attention was attracted to the change from wholesomeness to impurity until the summer of 1871, when an expedient was tried by the city government of Cambridge to relieve the situation. This effort, unhappily, only served to render matters worse than they had been before. It was the construction of a dam, four or five feet in height, at the Bridge Street crossing. Now water-filling and water-flooding are two very different things. Of course the effect of the filling, created by the dam, was to increase the settling character of all the basins above Bridge Street. The trial of this experiment, during three summer weeks, awakened the opposition of Somerville, and induced the removal of the dam by Cambridge. It never, however, was thoroughly removed, and the influence of the experiment yet lingers. It left permanent effects, in a largely increased deposit upon the bed of the basin. Of course, this must have been the result, for the influence of the ebb tide in bearing oceanward the more solid and heavier contributions to the water, to be retired with the last half of the ebb, was wholly lost. Hitherto, but slight attention to the gathering impurities in the river-beds had been excited. But presently, and as the immediate

fruit of this mistake, public apprehension was awakened, and it has been since engaged in an effort to trace and detect the source of the atmospheric affliction from which the community suffers.

As long as the question of the treatment to be applied for the cure of the evil in the river-beds was a matter of controversy, there was much excitement in the community and denunciation of all suspected causes of the grievance. But men, not inflamed by past relations to the contest,—such as former mayors of Cambridge; the present mayors of both Cambridge and Somerville; nearly every member of the present Board of Aldermen of Cambridge; representatives in both Houses of the Legislature; the late city solicitor, Mr. Parker, together with other prominent citizens,—have the good sense to bow to the advice of the Joint Commission, and the equity to wait for its results. There is no present commotion in Cambridge and Somerville over the vexed "Miller's River nuisance." There is a very hopeful attention directed toward the progress and results of the methods suggested by this Board, and enforced by the Legislature, for the extermination of the nuisance. Public expectation rests confidently in the belief that the filling of the basins, and the providing of the grand sewer, will cure past and lingering evils in the district. So much for a locality.

Continuing the contemplation of purely sanitary observations, you find us employed, with constant and liberal efforts, to relieve the reasonable objections of the community; having every wish for, and interest in, its prosperity and comfort. But attention directed toward our particular establishment—quieted by the fact that if any similar business can exist in any available situation in Massachusetts, we ought not to be, at present, disturbed—is led forward to the ever-pressing inquiry, how the reconciliation, through the efforts of scientific men, of these commercial interests and the public comfort can be solved and accomplished.

The contemplation of the removal from Boston to the West of the hog-slaughtering business leads us to consider what such a step would cost this community. The first effect which summons itself to attention, is the immediate promise of a hard winter, with low wages, and a curtailed employment of the laboring class. To them, as to all consumers, it would mean and be an increase, in our local markets, of at least four cents a pound in the price of pork,—the

staple meat consumed by them. It would advance the price of beef and mutton, also, in the same ratio, in this neighborhood. Pork, every practical dealer in provisions knows, regulates the price of all animal food. The farmer and stock-raiser in Maine and Vermont, or in the West, will tell you this. They, outside of your jurisdiction, watch, like the near neighborhood, what is in progress here.

I presume that the Board are in agreement with Dr. John Simon, — the first sanitarian in England,—who, in his testimony before the Parliamentary Commission, lately said : "It is of great importance for the happiness and for the health of a community, that fresh meat should be easily obtained, and as cheap as possible."

It may be said that these are exceptional times ; but the leap is easy to permanent commercial effects upon Boston. Time was when Boston, under the enterprise and guidance of her early merchants, held up her head in bold and lofty contest for the commercial supremacy of the American shore of the Atlantic. To remind you of the disastrous results to the commercial prosperity of Boston, which may flow from ill-advised measures, let me call to your attention the tax upon sales by auction, which, on its adoption about thirty years ago, drove away to New York our trade with China, which had been the pride and support of the commerce of Boston. Then followed a period of decline and despondency, and New York advanced to what seemed to be a settled and permanent obscurcation of Boston. We lost the English steamers. Imports took the lead of exports. All was in decline. Many were they who predicted that the acme of Boston prosperity had been reached and passed. But there came a fresh impulse from an unanticipated quarter. Mr. Squire started his business upon the banks of Miller's River, and others followed him. Finally the business attracted the attention of the Cunard line. Boston smarted under the withdrawal of steam communication with Europe. Investigation was had. The fresh impulse given by this business to the port of Boston won the steamships back. *They stay or go, according as it continues or perishes, under your order.*

I venture to say that no proposition to extinguish any one business house, or any collection of business establishments belonging to the same class, ever awakened, in this community, such serious attention or conspicuous remonstrance as this hearing has drawn forth.

Facilities for commercial intercourse determine the results of commercial rivalry. There are, perhaps, fifty or one hundred persons in East Cambridge (not a soul comes here from Somerville) who, moved by one motive or another, ask you to destroy our business and drive us from the Commonwealth. They fail to attract any support from the local authorities. Against their effort the Boston Board of Trade enters its solemn protest. Unwilling to say, on mere custom-house presentation, that the assailed business should be preserved, the merchants of Boston appoint a committee, conspicuous for intelligence and character, and headed by that distinguished and experienced gentleman, the Hon. Alexander H. Rice,—long in the front, as mayor of the city and its member in Congress,—as the representatives of Boston, to visit our establishment, and to test with a practical, common-sense, business judgment the validity of the objections raised against it. On a thorough examination, they unanimously agreed that these were unfounded. They made their report. It received the unanimous indorsement of the body that sent them forth on the service. They appeal to you not to strike down this business and drive away foreign connections with the city of Boston.

Beside the protest of the Cunard Steamship Company, in behalf of the ocean service of Boston,—one in three of whose ships is loaded by the single establishment that I represent,—the Boston and Albany Railroad Company, to whom we pay \$700,000 in freights annually, presents its interest to your attention. And this involves the State, to which it is a debtor. Every other road leading from Boston, including the coming Tunnel line, in which the State is concerned to the extent of \$12,000,000, is largely interested in the question whether this business shall continue or perish.

The product of my clients' establishment is distributed in every direction. You will remember that its annual value is \$8,000,000, of which five millions find a market at home. By its life, every spring of Boston commerce is touched and invigorated. Why? *Forty-five per cent of the exports of Boston are furnished by this business.* In the light of these facts, no one holding any official relation to this hearing can be surprised at the unparalleled rally of general business interests in support of a cause denominated private, but really the cause of the community.

Permit me to say that the community watches with solicitude the progress of this investigation. Practical, common-sense judg-

ment is being applied to its developments. What has been presented within this room has had a much wider hearing without and beyond it. In the marts of business every step is watched. A wide and interested audience of the whole public is addressed.

The existence of every power and the question of its continuance are dependent upon popular welcome and support. My clients, far from being fearful or timid under intelligent and practical investigation, desire its observation. It is inconceivable to them that an establishment, which the necessities of the community demand should exist in some convenient and appropriate location, can be condemned where it now is situated. Public opinion has testified, by the action of local tribunals; and we have presented to you an overwhelming exposition of resident feeling, judgment, and advice.

It occurs to any one indifferent to the controversy,— and therefore, of course, to the gentlemen of this Board,— that the local Boards of Health of Cambridge and Somerville, possessing ample powers, may be properly trusted; and, as the most intimate representatives of the people, should have confided to them the disposition and settlement of the controversy, presented by individuals, merely, to your attention. I ground myself upon a fair and equitable proposition in this suggestion.

I speak in behalf of a very great interest. If a survey of the whole Commonwealth be had, it can attract to your attention no office the equal in importance of that which now assembles you. You hold in your hands a very grave duty, and there is nothing but good sense and courage on the part of those who ask you, under all the attendant circumstances, to leave the solution of the controversy to the local authorities, chosen to office by, and representing, the home opinion and judgment. Trust these local authorities. They are vigilant, and upon the ground. It seems strange that an appeal should be made from their best informed judgment, with the dream, even, that it would be reversed elsewhere. It seems stranger yet that that appeal should be made to one branch of the Commission to whom the Legislature delegated the duty of discovering and recommending the proper remedies to be applied for the relief of this general district, and whose recommendations, in every respect, have entered into absolute requirements of law, by the unaided, and opposed, exertions of my clients. Nay, more; I look upon it as among the strangest of my personal and professional experiences,

that I should be summoned to utter a word of defence, here and now, in their behalf; when, by common acknowledgment, it is known and proved that the remedies which this Board itself advised are in progress of accomplishment, and that in the van of their carrying out stand the accused. I pray you, is anybody in earnest and honest in this matter? Search all Somerville and Cambridge to-day, and you will not find the hand, official or private, which has applied itself with such good faith and energy to the accomplishment of your advice and direction.

Do we ask too much of your equity and judgment, when we stand here to-day with one plain, righteous request, — which is, that you will permit us, as a party to a controversy which you have helped to solve, to do the work already assigned to us, willing to abide by its results, and conscious that they involve the settlement of the question of the continuance of our business? Why this premature renewal of opposition? Cannot our opponents wait to see what comes from the developments of your advice, already given in the premises? Rely upon it, the present application finds its spring in the animosity of individuals, and is not sustained by the good judgment and sense of justice of the community at large. At least, let us try one, and the first, of your prescribed remedies before we are sacrificed to those who have opposed us from the start. Remember that the local authorities are quiet, friendly, and expectant of good results from measures now in progress. One remedy at a time! The problem is a complicated one. Let it not become further involved and obscured by a confusion of official action. I think we are entitled, in view of liberal expenditures already made and to be faithfully continued by us, to claim that the filling and the sewer shall have a fair trial. If they fail to obliterate the nuisance, then, but not until then, in common fairness, ought my clients to be assailed, or molested, or put to the trouble and expense of an investigation like the present.

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